

Notice of Allowability

Application No.

09/916,264

Examiner

Carramah J. Quiett

Applicant(s)

KAIFU ET AL.

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendments filed on 4/05/2005.
2. ☒ The allowed claim(s) is/are 8 and 9 (These claims are renumbered as 1 and 2, respectively).
3. ☒ The drawings filed on 4/05/2005 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>05022005</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Drawings

1. The drawings were received on 4/05/2005. These drawings are acceptable.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Magluyan on April 29, 2005.

The application has been amended as follows:

The title has been changed to: "Image Sensing Apparatus Including An Image Sensing Unit Having A Non-destructive Read Function".

Claim 8 have been changed to:

8. (Currently Amended) An image sensing apparatus comprising:
an image sensing unit having a non-destructive read function, adapted to sense an object image;

a subtractor circuit adapted to sequentially output a plurality of corrected values, wherein each of said plurality of corrected values is a difference between a first frame included in a

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plurality of frames sequentially read out non-destructively from said image sensing unit and a second frame included in said plurality of frames, read out before the first frame.

a driver circuit including a comparator circuit for comparing an output value read out from said image sensing unit with a reference value, said driver circuit changing a read mode of said image sensing unit to a normal read mode if the output value exceeds the reference value, wherein the normal read mode resets said image sensing unit and reads out a signal after the reset; and

a memory table for storing position information of a defective pixel of said image sensing unit, wherein said driver circuit does not change the read mode if an output value for the defective value is to be output, by referring to the position information stored in said memory table.

Claim 9 has been changed to:

9. (Currently Amended) An image sensing apparatus comprising:

an image sensing unit having a non-destructive read function, adapted to sense an object image;

a subtractor circuit adapted to sequentially output a plurality of corrected values, wherein each of said plurality of corrected values is a difference between a first frame included in a plurality of frames sequentially read out non-destructively from said image sensing unit and a second frame included in said plurality of frames, read out before the first frame; and

a driver circuit including a comparator circuit for comparing an output value read out from said image sensing unit with a reference value, said driver circuit changing a read mode of said image sensing unit to a normal read mode if the output value exceeds the reference value,

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wherein the normal read mode resets said image sensing unit and reads out a signal after the reset; and

a memory table for storing position information of an invalid area other than an image sensing area of said image sensing unit, wherein said driver circuit does not change the read mode if an output value for the invalid area is to be output, by referring to the position information stored in said memory table.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carramah J. Quiett whose telephone number is (571) 272-7316. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.J.Q.
May 2, 2005


NGOC-YEN VU
PRIMARY EXAMINER